REMARKS

Claim 12 has been canceled. Claims 1, 5, 6, and 8 have been amended. The application includes claims 1-8, 10, 11, 15, and 16.

Claims 1-8, 10-12, and 15-16 have been rejected for indefiniteness. This rejection is traversed.

With respect to claim 1, the office action suggests that there is no limitation in the claim to explain where, when, and how oxidation occurs. However, it is should be noted that the invention is not really directed to oxidation forming adhesions, as this is the natural result of organosilicon compounds being oxidized. Rather, the invention is directed to process which primarily takes place after formation of adhesions ("when"), on a storage material ("where"), by removing the storage material, purifying it, and re-introducing it into the regenerator ("how").

Claim 1 is drawn to a method for operating an exhaust gas purification system for exhaust gas which contains organosilicon compounds. Claim 1 has been amended for purposes of clarity to recite that the treating step results in the formation of adhesions containing silica on said heat storage material formed by oxidation of organosilicon compounds. As is discussed in the application in the paragraph bridging pages 2 and 3, adhesions of silica occur in a number of plants (e.g., regenerative post combustion (RPC), thermal post combustion (TPC), etc.). A problem, solved by the present invention, is that in prior art systems coating of the regenerator storage materials with silica (SiO_2) clogs the storage materials and requires manual dismantling of the monolithic storage materials, followed by steam cleaning of each component and manual reinstallation–this being difficult in regard to both the labor and working conditions required (see page 2, lines 17-36). As discussed during the interview and explained on page 5, lines 30 et seq., **by having a heat storage material that is in the form of a bulk material, e.g., solid or hollow spheres, pebbles, clay, etc., which collectively forms a bed, allows for at least a portion of the heat storage material (i.e., a portion of the bed) to be removed and purified, and then returned to the system.** Thus, the system can be operated in a

safe and cost effective manner, and does not require dismantling and re-assembly of a monolithic regenerator.

With respect to claim 5, an amendment in a manner suggested by the Examiner has been made where it is now specified that flow takes place alternately between the at least two or more regenerators.

Claim 6 has been amended in the same manner that claim 7 was amended in the previous response. A similar amendment has been made to claim 8.

To simplify matters and to place the application in immediate condition for grant, claim 12 was simply canceled. The applicant reserves the right to pursue this claim or other claims supported by the specification in one or more continuing applications.

Claims 1-8, 10-12, and 15-16 were rejected as bing obvious over Japanese Patent JP 2002-061822 (JP '822) in view of U.S. Patent 4,940,567 to Ohlmeyer. This rejection is traversed.

At the outset, it should be recognized that the teaching of JP '822 is to enhance temperature during combustion, but not to remove the heat regenerative element for cleaning of the same periodically. It is identified in JP '822 that the silica present on the element has dramatically higher hardness, thus, removing the silica is difficult. The plant in JP'822 has no means to operate when cleaning of the elements is performed. Rather, the teaching in JP '822 would be to have a system which avoids adherence of silica, as opposed to having a system which could be more easily cleaned.

JP '822 does not disclose or teach anywhere that the heat regulative element is a bed. In contrast to the present invention, JP '822 refers to an element only. JP '822 is thus like the prior art discussed on page 2 of the application. That is JP'822 deals with an element composed of one or two pieces, in contrast to a bed composed of thousands or millions of small elements which is the case in the present invention. To better highlight this distinction, claim 1 has been amended to use the term "bulk material" which is described by example on page 5, lines 30 et seq. where it is noted that the heat storage material is at least partly in bulk material form such as solid or

hollow spheres, pebbles, clay, etc. This bulk material functioning as the heat storage material, collectively forms a bed, and allows for at least a portion of the heat storage material (i.e., a portion of the bed) to be removed and purified, and then returned to the system. This is simply not done in JP '822.

Further concluding that a monolithic heat regenerative element is in the form of a bed because exhaust gas can pass through the element is not correct. This conclusion would fail to recognize that monolithic structures used in prior art regenerative systems typically have openings and passages, e.g., in the form of honeycombs or passages to allow exhaust gas to pass through the element. Attached for the Examiner's consideration is a figures showing a typical prior art monolithic structure which is similar to the JP'822 element.

Ohlmeyer does not make up any of the deficiencies of JP '822 and does not solve the problem underlying the present invention, namely, providing a low cost system for removing organosilicon compounds from flue gases while permitting safe and easy removal of silica containing adhesions which could, e.g., take place during operation of the plant. Ohlmeyer is focused on recycling heat storage elements with a catalyst whereby the heat storage elements are polluted with dust and wear material. Ohlmeyer pertains to catalyzing reactions that reduce noxious substances in flue gas (e.g., ammonia and Nox–see column 3, lines 46-50). In Ohlmeyer, there are elements that are coated with a catalyst, that are heated by flue gas, and which catalyze the reduction of noxious substances. When these elements are spent (i.e, poisoned so that they cannot catalyze the desired reaction), they are either discarded or regenerated. Ohlmeyer does not teach recycling of the heat storage elements which allows removal of exhaust gas while not requiring elevation of the temperature.

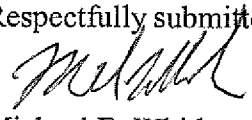
In view of the foregoing, it respectfully requested that the application be reconsidered, that claims 1-8, 10, 11, 15, and 16 be allowed, and the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or

personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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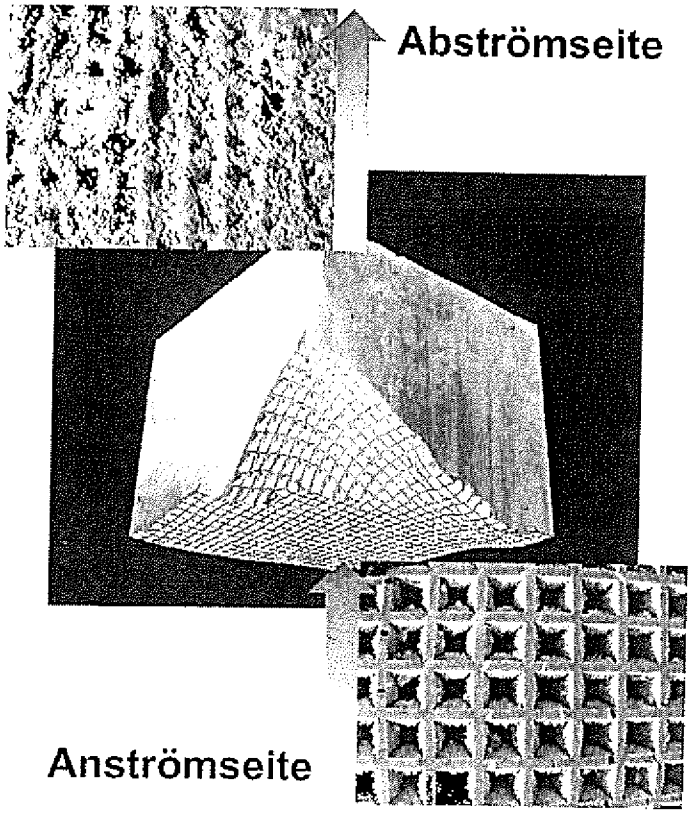

Bild 7: Siliziumoxidanhaftungen an einem Monolithen aus RNV-Anlage. (Anwendung: Aufbereitung von Kunststoffabfällen (DSD)).

Derartige Anhaftungen mit Siliziumdioxid treten nicht nur bei RNV-Anlagen auf, sondern auch in herkömmlichen thermischen Nachverbrennungsanlagen mit rekuperativer Abluftvorwärmung (TNV-Anlagen). Diese verstopfen aufgrund ihrer Geometrie meist nicht vollständig. Jedoch sind auch Fälle bekannt geworden, bei denen es infolge von Siliziumoxidanhaftungen innerhalb kurzer Zeit zu Betriebsstillständen und Übertemperaturschädigungen gekommen ist (vgl. **Bild 8**).

Bild 8: Siliziumdioxidanhaftungen (teilweise schon beseitigt) am Wärmeübertragerboden einer TNV-Anlage (Anwendung: Fassrekonditionierung).